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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,752	03/30/2004	Evren Eryurek	30203/37866	5459

4743 7590 04/12/2007
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EXAMINER

CHANG, SUNRAY

ART UNIT	PAPER NUMBER
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2121

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/812,752

Applicant(s)

ERYUREK ET AL.

Examiner

Sunray Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-155 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-155 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20040714, 20050415
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 155 are presented for examination.

Claims 1 – 155 are rejected.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on July 14th, 2004 and April 15th, 2005 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

3. Claim 42 is objected to because of the following informalities: “wherein in” the third routine should be “wherein”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

The term, “the selected configuration object”, in claim 15 is vague and indefinite.

Because the term, “the selected configuration object”, has not been previously defined by this claim or the independent claim 1. The term, “the selected configuration object”, should be modified to “the selected template configuration object”, based on independent claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1 – 25, 27 – 57, 59 – 126 and 128 – 155 are rejected** under 35 U.S.C. 102(b) as being anticipated by Bob Spriggs et al. (U.S. Patent No. 6,421,571, and referred to as **Spriggs** hereinafter).

Regarding independent claim 1, Spriggs teaches,

- A configuration viewing system for use in a process plant having a processor and a user interface [An industrial plant asset management system, graphic user interface, Abstract, Fig. 2; see further Col. 5, lines 57 – 64], the configuration viewing system comprising:
 - a computer readable memory; [database, Col. 5, lines 57 – 64]
 - a plurality of template configuration objects stored on the computer readable memory, [asset objects or asset representations, Col. 13, line 64 – Col. 14, line 19; Fig. 7; see further Col. 26 – Col. 28] wherein each of the plurality of template configuration objects includes
 - a graphical representation of a physical entity within the process plant, [represents each asset with a correlative icon on the GUI, Col. 14, lines 6 – 19]
 - a parameter storage adapted to communicate with the process plant to obtain and store device parameter information associated with the physical entity within the process plant

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[current values, bargraph object, Col. 15, lines 36 – 49; a parametric event module, 214, Col. 27, lines 46 – 54; see further Col. 15 – Col. 16] and

- a configuration storage adapted to store configuration parameters associated with the physical entity within the process plant; setpoints module, 216, Col. 27, lines 55 – 59; see further 26 – 28]
- a first routine stored on the computer readable memory and adapted to be executed on the processor to present a library section on the user interface, the library section adapted to present depictions of the plurality of template configuration objects to a user via the user interface; [common tree manager module, Col. 26, line 65 – Col. 27, line 7]
- a second routine stored on the computer readable memory and adapted to be executed on the processor to present a configuration area on the user interface; [enterprise view, 160, Fig. 7] and
- a third routine stored on the computer readable memory and adapted to be executed on the processor to enable a user to select one of the plurality of template configuration objects from the library section and to place the selected template configuration object within the configuration area to create a process configuration module within the configuration area, the process configuration module associated with a portion of the process plant. [Fig. 7 – 9, Display module and associated display devices, Col. 7, line 45 – Col. 8, line 11]

Regarding dependent claim 2, Spriggs teaches,

The configuration viewing system of claim 1, further including

- a fourth routine stored on the computer readable memory and adapted to be executed on the processor to execute the process configuration module to obtain device parameter information from the process plant pertaining to the physical entity associated with the process configuration module and to make the obtained device parameter information available to the user via the user interface. [data acquisition core module, Col. 9, lines 13 – 38; which executing to obtain parameter and making parameter display can also be found in Col. 9, lines 14 – 38]

Regarding dependent claims 3 – 5, Spriggs teaches,

The configuration viewing system of claim 2, including

- an application communicatively coupled to the process configuration module which uses the device parameter information and the configuration parameters associated with the process configuration module to perform a data processing function with respect to the physical entity associated with the process configuration module. [display module architecture and views, Col. 13, lines 25 – 33; further see “plots object and view”, “plots groups and view” and “plots session object”, Col. 17, line 20 – Col. 20, line 28]

Regarding dependent claims 6 – 10 and 35 – 38, Spriggs teaches,

The configuration viewing system of claim 5, wherein

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- the application is a process control application, a control diagnostic application, a management application, a device diagnostic application, a control optimizer application. [setup and diagnostic purpose, Col. 17, line 10, reference data manager and view, Col. 17, lines 57 – 64, and Col. 16, line 59 – Col. 22, line 11]

Regarding dependent claims 11, 12 and 14, Spriggs teaches,

The configuration viewing system of claim 2, wherein

- the configuration parameters include multiple display formats for the device parameter information and wherein the fourth routine displays the device parameter information on the user interface according to a selected one of the multiple display formats. “plots object and view”, “plots groups and view” and “plots session object”, Col. 17, line 20 – Col. 20, line 28]

Regarding dependent claim 13, Spriggs teaches,

The configuration viewing system of claim 12, wherein

- the display format is one of an operator display format and a maintenance display format. [Col. 29, lines 33 – 36; see further Col. 29, line 31 – Col. 30, line 2]

Regarding dependent claim 15, Spriggs teaches,

The configuration viewing system of claim 1, wherein

- the third routine is adapted to enable a user to store the configuration parameters within the configuration storage of the selected configuration object to create the process configuration module. [configuration tools, Col. 5, line 66 – Col. 7, line 44]

Regarding dependent claim 16, Spriggs teaches,

The configuration viewing system of claim 15, wherein

- the third routine is adapted to enable a user to store data indicative of one or more physical attributes associated with the physical entity as the configuration parameters. Data collector modules, display module, selecting, dragging, opening, Col. 8, lines 4 – 11]

Regarding dependent claim 17, Spriggs teaches,

The configuration viewing system of claim 16, wherein

- the one or more physical attributes includes at least one of a size, a flow capacity, a type, a volume, a surface area, a number of process input/output connections, a type of a process input/output connection, and a timing parameter. [Col. 10, lines 37 – 49]

Regarding dependent claim 18, Spriggs teaches,

The configuration viewing system of claim 15, wherein

- the third routine is adapted to enable a user to store data indicative of a communication attribute associated with the physical entity. [Col. 11, lines 26 – 45]

Regarding dependent claim 19, Spriggs teaches,

The configuration viewing system of claim 18, wherein

- the communication attribute includes at least one of a communication protocol, a communication connection type, a number of communication inputs/outputs, and a type of

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communication connection input/output. [a protocol requested by customer application, Col. 11, lines 55 – 63; Col. 8, lines 25 – 28]

Regarding dependent claim 20, Spriggs teaches,

The configuration viewing system of claim 15, wherein

- the third routine is adapted to enable a user to store control information associated with control of the physical entity within the process plant. [configuration information and commands, Col. 8, lines 31 – 38]

Regarding dependent claim 21, Spriggs teaches,

The configuration viewing system of claim 20, wherein

- the control information includes a control routine. [commands, Col. 8, lines 31 – 57]

Regarding dependent claim 22, Spriggs teaches,

The configuration viewing system of claim 20, wherein

- the control information includes an indication of a type of a control routine used to control the physical entity. [a specific protocol for collecting data from each of the specific data acquisition device, Col. 8, lines 39 – 57]

Regarding dependent claim 23, Spriggs teaches,

The configuration viewing system of claim 20, wherein

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- the control information includes a control diagnostic used to perform diagnostics with respect to controlling the physical entity. [Col. 16, line 59 – Col. 22, line 11]

Regarding dependent claims 24 and 25, Spriggs teaches,

The configuration viewing system of claim 20, wherein

- the control information includes values for one or more control parameters associated with control of the physical entity; the one or more control parameters includes at least one of a setpoint, an initial value, a default value, a range, a measurement unit, a limit, and a deadband. [setpoints, Col. 27, lines 55 – 59; see detail in Col. 26 – 28]

Regarding dependent claim 27, Spriggs teaches,

The configuration viewing system of claim 1, wherein

- the configuration storage is adapted to store maintenance information associated with operation of the physical entity. [maintenance records, Col. 3, lines 53 – 57 and Col. 4, lines 31 – 37]

Regarding dependent claims 28 and 38, Spriggs teaches,

The configuration viewing system, wherein

- the maintenance information includes alarm configuration information. [parametric alarming, Col. 3, lines 53 – 57; see further in Col. 3, line 53 – Col. 4, line 37]

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Regarding dependent claim 29, Spriggs teaches,

The configuration viewing system of claim 27, wherein

- the maintenance information includes device health configuration information. [health and operation of the system, Col. 20, lines 31 – 45]

Regarding dependent claim 30, Spriggs teaches,

The configuration viewing system of claim 27, wherein

- the maintenance information includes maintenance diagnostics information. [expediting problem resolution during diagnostics process, Col. 3, lines 62 – 67]

Regarding dependent claims 31 and 32, Spriggs teaches,

The configuration viewing system of claim 1, wherein

- the configuration storage is adapted to store process management information associated with managing the process in which the physical entity is located; the process management information includes data related to at least one of a product type, a throughput, an efficiency, an uptime, a downtime, and a yield. [events include alarms diagnostic status, asset event (start up, shutdown) and configuration events, Col. 21, lines 4 – 5; see further details in Col. 20, line 46 – Col. 21, line 17]

Regarding dependent claim 33, Spriggs teaches,

The configuration viewing system of claim 1, wherein

- the plurality of template configuration objects includes one of a device object representative of a device within the process plant, a unit object representative of a unit within the process plant, an area object representative of an area of the process plant and a connection object representative of a connector element within the process plant. [all plants, measurement points, asset objects, Col. 14, lines 20 – 64]

Regarding dependent claim 34, Spriggs teaches,

The configuration viewing system of claim 1, wherein

- the configuration parameters include an indication of one or more applications adapted to use the device parameter information to produce process information related to the physical entity [display module and associated display devices, Col. 7, lines 45 – 63] and further including a fourth routine adapted to present the process information on the user interface. [data acquisition main module controls the starting and ..., Col. 9, lines 39 – 67]

Regarding dependent claim 39, Spriggs teaches,

The configuration viewing system of claim 1, wherein

- the third routine is adapted to enable the user to create a plurality of interconnected process configuration modules in the configuration area, wherein each process configuration modules is associated with a different portion of the process plant, [Col. 13, lines 25 – 63; Fig. 6 and 7] and further including

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- a fourth routine adapted execute the plurality of interconnected process configuration modules, including a first display routine adapted to display the graphic representations for a user-specified sub-portion of the plurality of interconnected process configuration modules on a user interface and a second display routine adapted to display process information associated with the process plant based on the user-specified sub-portion of the plurality of interconnected process configuration modules. [Col. 14, lines 6 – 63; further apply to claims 2 and 3]

Regarding dependent claim 40, Spriggs teaches,

The configuration viewing system of claim 39, wherein

- the second display routine displays the process information in a manner determined by the configuration parameters stored in the configuration storage of at least one of the process configuration modules within the user-specified sub-portion of the plurality of interconnected process configuration modules. [Col. 14, lines 6 – 63]

Regarding dependent claim 41, Spriggs teaches,

The configuration viewing system of claim 40, furthering including

- an application that uses the process information of one or more of the process configuration modules within the user-specified sub-portion of the plurality of interconnected process configuration modules to produce the process information. [Col. 13, lines 25 – 63]

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Regarding dependent claims 42 – 45, Spriggs teaches,

The configuration viewing system of claim 1, wherein

- the third routine is adapted to enable the user to interconnect two or more of the template configuration objects within the configuration area to create the process configuration module. [Col. 13, lines 25 – 63]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 26, 58 and 127 are rejected** under 35 U.S.C. 103(a) as being unpatentable over **Spriggs** in view of William Steven Leibold (U.S. Patent No. 5,818,736 and referred to as **Leibold** hereinafter).

(**Spriggs** as set forth above generally discloses the basic inventions.)

Regarding dependent claims 26, 58 and 127,

Spriggs teaches a plurality of template configuration objects in a configuration viewing system. [an industrial plant asset management system, graphic user interface, Abstract, Fig. 2; see further Col. 5, lines 57 – 64]

Spriggs does not teach a simulation operation of an entity within the process plant.

Leibold teaches a simulation operation of an entity within the process plant [simulating signal flow through a logic block pattern of a real time process control system, Abstract], for the purpose of producing simulated output data and real time control system responses thereby testing the logic block pattern, Abstract].

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of **Spriggs** to include "a simulation algorithm adapted to simulate operation of an entity within the process plant", for the purpose of producing simulated output data and real time control system responses thereby testing the logic block pattern, Abstract].

7. **Claims 46 – 126 and 128 – 155, have been considered, yet, have been rejected** for the same reason indicated in the rejections to claims 1 – 45.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. via telephone number (571) 272-3682 or facsimile transmission (571) 273-3682 or email sunray.chang@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687.

The official facsimile transmission number for the organization where this application or proceeding is assigned is (571) 273-8300.



Anthony Knight
Supervisory Primary Examiner
Group Art Unit 2121
Technology Center 2100
U.S. Patent and Trademark Office

March 29, 2007